

NOTES ON BROMELIACEAE, XXIX

Lyman B. Smith

AECHMEA

AE. DICHLAMYDEA Baker var. PARIAENSIS Pittendrigh, var. nov..  
A var. dichlamydea bracteis primariis inferioribus suboblongis  
apice rotundatis apiculatisque, firmis, quam ramorum basibus  
sterilibus paulo brevioribus vel longioribus differt. Pl. I,  
fig. 1: Lower primary bract x 1.

VENEZUELA: SUCRE: Mountains above Cristobal Colon, 1944,  
Pittendrigh 1094 (US, type); 1092, 1093, 1095 (US).

Dr. C. S. Pittendrigh has kindly consented to the publication  
of the above variety in order to clear the way for the Bromelia-  
ceae of the "Flora de Venezuela".

AE. TONDUZII Mez & Pittier, Bull. Herb. Boiss. II. 3: 132.  
1903, emend. L. B. Smith. Sepalis valde asymmetricis, suborbicu-  
laribus, 6 mm longis sine mucrone, basi brevissime connatis;  
petalis 13 mm longis, ligulis binis fimbriatis auctis; staminibus  
inclusis, antheris oblongis, 5 mm longis; pollenis granulis bipo-  
ratis; ovario globoso, 7 mm diametro; placentis apicalibus. Pl.  
I, fig. 2: Sepal x 5; fig. 3: Petal x 5.

COSTA RICA: PUNTARENAS: San Vito de Java, R. G. Wilson 64-738  
(US).

DEUTEROCOHNIA

D. DIGITATA L. B. Smith, sp. nov. A D. strobilifera Mez, cui  
verisimiliter affinis, scapi bracteis supremis integris, inflores-  
centia digitata vel subdigitata vel simplici, bracteis primariis  
parvis integrisque differt.

D. strobilifera sensu Castellanos, Gen. & Sp. Pl. Argent. 3:  
194, pl. 44, 126-b. 1945; as to Argentine plants and the illus-  
trations.

PLANTS forming rings, the flowering shoot 15-25 cm high.  
LEAVES rosulate, 10-20 cm long; sheaths short but ample; blades  
18 mm wide, covered with a whitish or silvery coat of scales,  
laxly serrate with spines 2 mm long. SCAPE erect, slender, near-  
ly equaling the leaves; scape-bracts exceeding the internodes,  
the upper narrowly lanceolate, entire. INFLORESCENCE digitate or  
subdigitate from a few spikes or rarely simple, glabrous; primary  
bracts much shorter than the spikes, entire; spikes slenderly cy-  
lindric, dense, to 5 cm long. FLORAL BRACTS ovate, acute,  
slightly shorter than the sepals; flowers sessile or subsessile.  
SEPALS elliptic, ca. 8 mm long; petals narrowly elliptic, obtuse,  
bearing a single scale at base, about equaling the stamens; style  
slightly exerted.

ARGENTINA: SALTA: Cerros de Cachi, 7 February 1943, Castella-  
nos s. n. (BA 46636, type); Cachi to Los Molinos, January 1897,  
Spegazzini s. n. (BA).

## DYCKIA

3. *D. SELLOA* (K. Koch) Baker.

BRAZIL: RIO GRANDE DO SUL: Rio Cai, 17 January 1964, Pereira 8468 & Pabst 7743 (LP).

Rio Cai is north of Pôrto Alegre in the area where Sellow spent over six months collecting. No verification of the occurrence of the species in Uruguay has been found and it seems likely that the record for the type was an error in labelling.

## HECHTLIA

*H. MACDOUGALLII* L. B. Smith, sp. nov. A *H. rosea* E. Morr. ex Baker atque *H. mezziana* L. B. Smith, quibus affinis, bracteis primariis ramorum bases steriles superantibus, petalis masculinis spathulatis subunguiculatis differt.

PLANT flowering about 1 m high, red except the leaves. LEAVES to 7 dm long, very narrowly triangular, 8 cm wide, appressed-lepidote throughout, coarsely repand-serrate. SCAPE elongate; scape-bracts vaginiform, the upper ones about equaling the internodes. INFLORESCENCE laxly bipinnate, ca. 7 dm long, 3 dm in diameter, glabrous; primary bracts lanceolate or ovate, acuminate, much exceeding the short sterile bases of the branches, thin; branches spreading, slender, subaxly flowered. Floral bracts broadly ovate, apiculate, much exceeding the 2 mm long pedicels; only the staminate flowers known, spreading. SEPALS broadly subelliptic, acute, 4 mm long; petals spatulate, subunguiculate, 7 mm long; stamens barely exceeding the petals; anthers elliptic, 2.5 mm long; remnant of the ovary largely inferior, making the pedicel appear nearly 4 mm long. Pl. I, fig. 4: Sepal x 5; fig. 5: Petal and stamen x 5; fig. 6: Section of pedicel and ovary remnant x 5.

MEXICO: OAXACA: Part shade, in soil on steep bank, Zapotitlán, December 1949, MacDougall s. n. (US, type); Nizanda, 24 February 1951, MacDougall 2 (US).

## NEOREGELIA

8a. *N. MCWILLIAMSII* L. B. Smith, sp. nov. A *N. carolinae* (Beer) L. B. Smith, cui affinis, foliis ex sicco minute pallidomaculatis, sepalis lanceolatis acutis differt.

LEAVES over 32 cm long; sheaths broadly elliptic, pale green, 14 cm long, subdensely vestite with appressed brown-centered scales; blades ligulate, broadly rounded and apiculate, 55 mm wide, entire or nearly so, inconspicuously pale-lepidote throughout, green near apex, below red with small green spots. SCAPE 3 cm long. INFLORESCENCE ca. 30-flowered, 35 mm in diameter, wholly dark red. FLORAL BRACTS lanceolate, attenuate, thin, about equaling the sepals; pedicels slender, to 5 mm long. SEPALS lanceolate, acute, slightly asymmetric, 32 mm long, connate for 6 mm. Pl. I, fig. 7: Inflorescence x 1/2; fig. 8: Sepal x 1.

BRAZIL: RIO DE JANEIRO: Large boulder pile near shore, north-east of Paratí, 13 February 1968, L. B. Smith & E. L. McWilliams 15432 (US, type; MICH, R, isotypes).

## PITCAIRNIA

216a. *P. COLIMENSIS* L. B. Smith, sp. nov. A *P. puberula* Mez & Smith ex Donn. Smith, cui affinis, sepalis alatis differt.

PLANT stemless, flowering 45 cm high. LEAVES fasciculate in a bulbous rosette; outer sheaths broadly ovate, castaneous, the inner longer and narrower and paler; blades dimorphic, some persistent and reduced to slender flat serrate spines, others foliaceous (inferred from the median scape-bracts), linear, attenuate, deciduous along a straight transverse line, spinose-serrate below the line. SCAPE erect, slender, at first appressed-tomentose with white finely divided scales; scape-bracts erect, equaling or exceeding the internodes, entire, the lowest vaginiform, lanceolate, acuminate, the median foliaceous, to 3 dm long, 10 mm wide, the upper narrowly triangular, filiform-caudate. INFLORESCENCE simple, laxly few-flowered, tomentose-lepidote when young. FLORAL BRACTS narrowly triangular, slightly longer or shorter than the pedicels; pedicels divergent, slender, to 10 mm long. SEPALs linear, 20 mm long, acuminate, the posterior ones broadly alate especially toward apex; petals naked, red; ovary 3/4 superior; ovules caudate. Pl. I, fig. 9: Sepal x 1.

MEXICO: COLIMA: Steep bluffs above Río Salado, 5 miles south of Colima, alt. 400 m, 17 July 1957, McVaugh 15509 (MICH, type; US). Open dry limestone cliffs, base of Cerro de San Gabriel, 19° 05' N, 103° 48' W, alt. 600-700 m, 1-4 August 1960, Iltis, Koeppen & Iltis 676 (MICH, US, WIS).

66. *P. MEGASEPALA* Baker, Journ. Bot. 19: 229. 1881. *P. theae* Mez in DC. Mon. Phan. 9: 376. 1896.

COSTA RICA: Boruca, Tonduz in herb. Pittier 6868 (BR, GH photo, type of *P. theae* Mez).

Contrary to the description, *P. theae* has alate sepals, leaving no distinction between it and the earlier *P. megasepala*.

63a. *P. RUDERALIS* L. B. Smith, sp. nov. A *P. tarapotensi* Baker, cui affinis, bracteis primariis parvis sed ramorum bases steriles superantibus, ramis brevibus subdense secundique florigeris differt.

PLANT stemless, flowering 1.5 m high. LEAVES all persistent; sheaths broadly ovate, the outer dark castaneous, completely covered with brown scales, the inner paler and apically attenuated; blades dimorphic, some much reduced but still green, serrate toward apex, others foliaceous, slightly narrowed at base, linear, attenuate, 4-5 dm long, 14 mm wide, flat, pale-lepidote beneath but very soon wholly glabrous. SCAPE erect, 5 mm in diameter at apex, glabrous; upper scape-bracts oblong to triangular, caudate or apiculate, much shorter than the internodes, pale-lepidote. INFLORESCENCE very laxly bipinnate, 4 dm long;

axis glabrous; primary bracts triangular, to 3 cm long, much exceeding the very short naked sterile bases of the branches; branches divergent, to 8 cm long, subdensely flowered. FLORAL BRACTS ovate or elliptic,  $\frac{1}{4}$  mm long, thin; flowers erect-secund, glabrous; pedicels slender, to 18 mm long. SEPALS linear-lanceolate, broadly subacute and apiculate, 17 mm long, ecarinate; petals  $\frac{1}{4}$  cm long, red, naked; ovary  $\frac{2}{3}$  superior; ovules caudate. Pl. I, fig. 10: Flower and floral bract x 1; fig. 11: Sepal x 1.

PERU: LORETO: On pajonal (high grass fallow ground) edge or old chacra, Obenteni in Gran Pajonal, Coronel Portillo, alt. 1150 m, 13 August 1966, Christowski 66-5B (WIS, type, US).

#### PUYA

Pourretia R. & P. Fl. Peruv. Prodr. 46, pl. 7. 1794; Fl. Peruv. 3: 33. 1802. Lectotype: Pourretia lanuginosa R. & P. Fl. Peruv. 3: 33. 1802.

The typification of Pourretia R. & P. is quite complicated and I am following the precedent of Bullock (Kew Bull. 40. 1960) in selecting that element which seems to have been the authors' intention.

In the Prodrómus, Ruiz and Pavon indicate that there are four species in Pourretia, but mention only one by name, P. sympaganthera. At the same time they say that it is atypical, and later in the Flora call it Guzmania while naming the other three species as Pourretia lanuginosa, pyramidata, and coarctata. The illustration of Pourretia in the Prodrómus is none of the four species thus accounted for but rather a species of Pitcairnia, most likely Pitcairnia paniculata R. & P.

Although he did not make a choice between Pourretia lanuginosa and P. pyramidata (DC. Mon. Phan. 9: 489. 1896), Mez used the name, Pourretia, for a subgenus of Puya and excluded P. coarctata from consideration. It therefore remains to choose between them, and since other considerations appear equal, I will take the first, Pourretia lanuginosa R. & P.

154a. PUYA CASTELLANOSII L. B. Smith, sp. nov. A P. chilensi Molina atque P. berteroniana Mez, quibus verisimiliter affinis, foliorum laminis utrinque dense tomentoso-lepidotis differt.

P. fiebrigii sensu Castellanos, Gen. & Sp. Pl. Argent. 3: 200, pl. 47. 1945; as to Argentine plants and the illustration.

PLANTS forming dense masses, flowering 1-2 m high. LEAVES many in a spreading rosette; sheaths reniform, 8 cm wide; blades narrowly triangular, 6-8 dm long,  $\frac{1}{4}$ 5 mm wide, broadly channeled, densely lepidote on both sides, serrate with retrorse and antrorse curved spines about 5 mm long and 15 mm apart. SCAPE 6 dm long, 35-40 mm in diameter, lepidote; scape-bracts deltoid, lepidote. INFLORESCENCE amply bipinnate, pyramidal, densely tomentose-lepidote; primary bracts ovate, acute or acuminate, many times shorter than the branches; branches divergent to spreading, over 15 cm long, the lower half to two-thirds subdensely floriferous, the remainder sterile with numerous bracts. FLORAL



BRACTS lanceolate, all but the lowest much exceeded by the sepals; pedicels divergent, 15 mm long. SEPALS triangular-ovate, acute, to 30 mm long; petals to 40 mm long, much exceeding the stamens. CAPSULES subglobose, acute, shorter than the sepals.

ARGENTINA: SALTA: Brealito, Valles Calchaquies, 20 November 1942, Castellanos s. n. (BA 45819, type); July 1945, Meyer 9164 (LIL); Arroyo de la Quesería, Cachi to La Poma, 9 February 1943, Castellanos s. n. (BA 46640); Molinos, January 1897, Spegazini s. n. (BA, LP 519).

#### WITTROCKIA

W. BRAGARUM E. Pereira & L. B. Smith, sp. nov. A W. superba Lindm. foliorum vaginis oblongo-ellipticis, sepalis obtusis, petalis magnis apice azureis alte appendiculatis, ab alteris speciebus foliis coriaceis grosse serratis differt.

LEAVES many, rosulate, to 35 cm long, coriaceous; sheaths oblong-elliptic, 12 cm long, entire, purplish, densely vestite on both sides with fine subappressed dark brown scales; blades ligulate, broadly rounded and cuspidate, slightly contracted at base, 4 cm wide, glabrous above, obscurely appressed-lepidote beneath, subdensely serrate with coarse spreading dark brown spines 3 mm long. SCAPE short, densely bracteate. INFLORESCENCE sunk in the center of the rosette, simple, few-flowered, involucrate with broadly elliptic outer bracts. FLORAL BRACTS small, narrow, exceeded by the ovaries; flowers slenderly short-pedicellate. SEPALS lance-ovate, obtuse, 35 mm long, connate for 10 mm; petals 65 mm long, high-connate, the appendages highly adnate to the claw, the blades narrowly elliptic, blue at apex; stamens included; ovary ellipsoid, 8 mm long; placenta central, globose. Pl. I, fig. 12: Sepal x 1; fig. 13: Petal x 1.

BRAZIL: RIO DE JANEIRO: Epiphytic and terrestrial in sunny places, Morro das Torres de Televisão, Teresópolis, 28 January 1968, P. I. S. Braga 64 (RB, type, US).

W. CAMPOS-PORTOI L. B. Smith, Smithsonian Misc. Coll. 126: 36, 186, fig. 89. 1955, emend. Smith & McWilliams. Bracteis florigeris exterioribus sepala aequantibus, interioribus brevioribus; petalis apice fulgide aurantiacis.

BRAZIL: RIO DE JANEIRO: Steep wooded ledge, Angra dos Reis, 1 February 1968, L. B. Smith & E. L. McWilliams 15369 (MICH, R, US).

Since the type of Wittrockia campos-portoi is a cultivated plant of unknown origin, the above collection serves to place the species geographically. It is more than likely toptotypical.

## Plate I

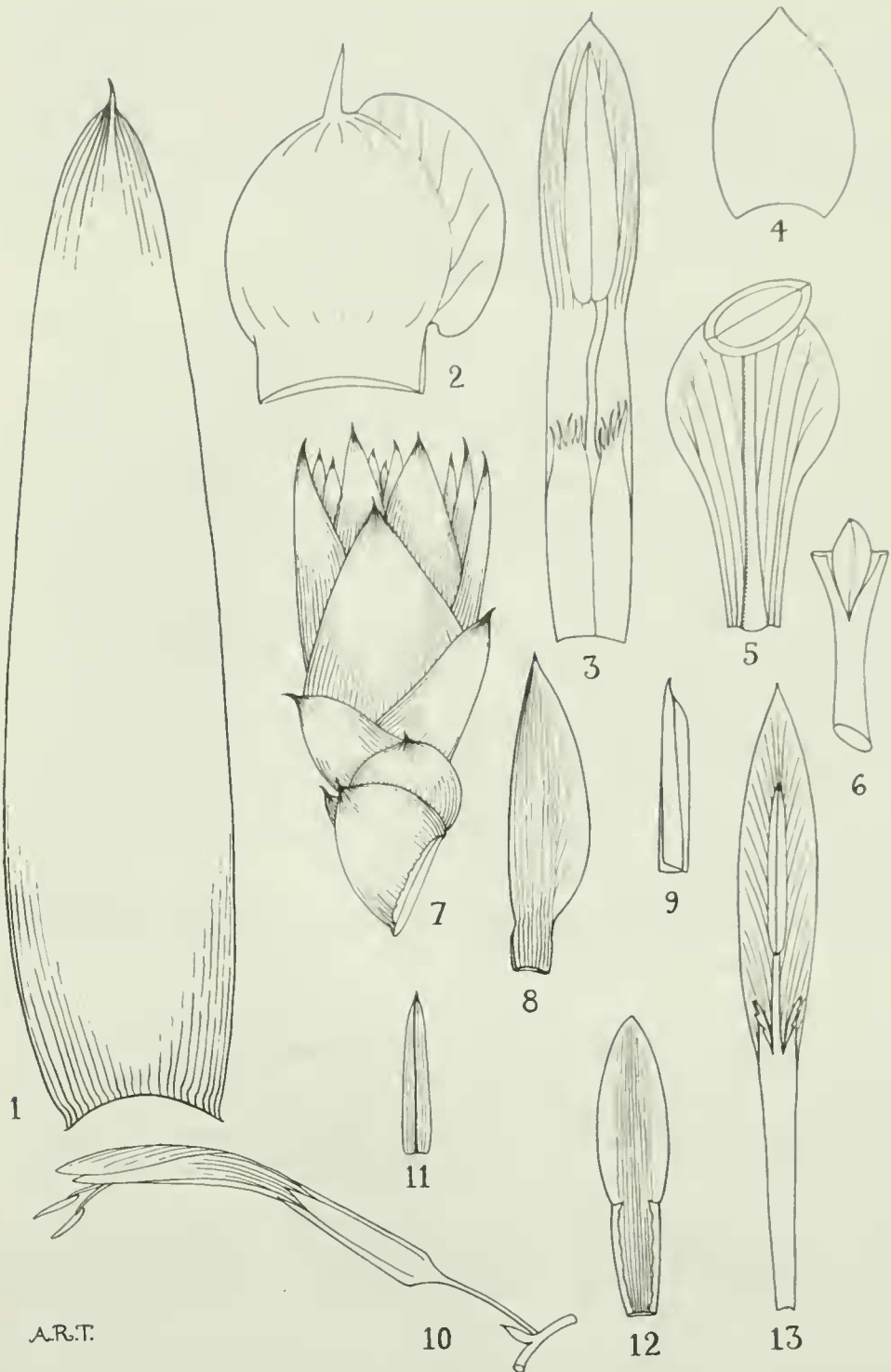


Fig. 1: *Aechmea dichlamydea* var. *pariaensis*; 2, 3: *Ae. tonduzii*;  
 4-6: *Hechtia macdougallii*; 7, 8: *Neoregelia mcwilliamsii*;  
 9: *Pitcairnia colimensis*; 10, 11: *P. ruderalis*;  
 12, 13: *Wittrockia bragarum*.